

U.S. PTO  
JC903 09/774557  
01/31/01

LIST OF DOCUMENTS CITED BY APPLICANTS (Use several sheets if necessary)		ATTY. DOCKET NO. 7998	SERIAL NO. not assigned
APPLICANT DeLong			
FILING DATE 1/31/2001		GROUP	not assigned

### U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	US 3,435,053	3/25/69	Beal et al	260/345.2	—	
	US 3,524,867	8/18/70	Beal et al	260/345.2	—	
	US 3,598,858	8/10/71	Bergstrom et al	260/468.0	—	
	US 3,691,216	9/12/72	Bergstrom et al	260/468 R	260/488R	
	US 3,706,789	12/19/72	Bergstrom et al	260/488 D	260/211R	
	US 3,776,938	12/4/73	Bergstrom et al	260/468 D	—	
	US 3,776,939	12/4/73	Bergstrom et al	260/468 D	—	
	US 3,839,409	10/1/74	Bergstrom et al	260/468 D	—	
	US 3,852,337	12/3/74	Bergstrom et al	260/488.R	260/410	
	US 3,882,241	5/6/75	Pharriss, BB	424/305	424/318	
	US 3,882,245	5/6/75	DuCharme, DW	424/318	424/305	
	US 3,896,156	7/22/75	Beal et al	260/468D	260/211	
	US 3,928,588	12/23/75	Robert, A	424/234	424/273	
	US 3,966,792	6/29/76	Hayashi et al	260/468D	260/210R	
	US 3,984,455	10/5/76	Beal et al	260/468D	260/247.2R	
	US 4,011,262	3/8/77	Hess et al	260/520B	260/240R	
	US 4,024,179	5/17/77	Bindra et al	260/473A	260/240R	
	US 4,061,671	12/6/77	Beck et al	260/514D	260/343.3R	
	US 4,073,934	2/14/78	Skuballa et al	424/305	260/295R	
	US 4,089,885	5/16/78	Husbands, GEM	260/448.8R	260/514D	
	US 4,123,441	10/31/78	Johnson, RA	260/345.2	424/283	
	US 4,128,720	12/5/78	Hayaski et al	560/9	260/327M	
	US 4,158,667	6/19/79	Axen, UF	260/413	260/346.22	
	US 4,225,507	9/30/80	Sih, JC	260/346.22	260/345.2	
	US 4,225,508	9/30/80	Sih, JC	260/346.22	260/345.2	
	US 4,284,646	8/18/81	Vorbruggen et al	424/305	260/340.5P	
	US 4,489,092	12/18/84	Vorbruggen et al	424/304	260/345.7P	
	US 4,499,293	2/12/85	Johnson et al	549/465	548/252	
	US 4,621,100	11/4/86	Lund et al	514/573	514/155	
	US 4,704,386	11/3/87	Mueller, RA	514/211	540/547	
	US 4,889,845	12/26/89	Ritter et al	514/63	514/573	
	US 5,063,057	11/5/91	Spellman et al	424/401	206/528	
	US 5,219,885	6/15/93	Frolich et al	514/530	—	
	US 5,280,018	1/18/94	Ritter et al	514/63	424/47	
	US 5,340,813	8/23/94	Klein et al	514/263	544/272	
	US 5,422,371	6/6/95	Liao et al	514/560	514/703	
	US 5,464,868	11/7/95	Frolich et al	514/530	—	
	US 5,508,303	4/16/96	Isogaya, et al	514/468	549/458	
	US 5,516,652	5/14/96	Abramovitz et al	435/69.1	435/240.1	
	US 5,567,079	10/22/96	Felder, A	405/80	405/74	
	US 5,576,315	11/19/96	Hallinan et al	514/211	540/547	
	US 5,578,640	11/26/96	Hanson, WR	514/530	514/573	
	US 5,578,643	11/26/96	Hanson, WR	514/573	514/530	
	US 5,605,814	2/25/97	Abramovitz et al	435/69.1	435/252.3	
	US 5,605,931	2/25/97	Hanson, WR	514/530	514/573	
	US 5,658,897	8/17/97	Burk, RM	514/118	546/22	
	US 5,663,203	9/2/97	Ekerdt et al	514/572	514/573	
	US 5,670,506	9/23/97	Leigh et al	514/258	514/263	

BB	US 5,681,850	10/28/97	Frolich et al	514/530	--	
	US 5,703,108	12/30/97	Cameron et al	514/382	514/304	
	US 5,719,140	2/17/98	Chandrakumar et al	514/211	540/547	
	US 5,759,789	6/2/98	Abramovitz et al	435/7.21	435/69.1	
	US 5,770,759	6/23/98	Ueno et al	560/53	560/121	
	US 5,792,851	8/11/98	Schuster et al	536/23.5	435/69.1	
	US 5,840,847	11/24/98	Abramovitz et al	530/350	435/69.1	
	US 5,834,498	11/10/98	Burk, RM	514/445	514/438	
	US 5,869,281	2/9/1999	Abramovitz et al	435/69.1	435/252.3	
	US 5,877,211	3/2/1999	Woodward	514/530	514/573	
	US 5,885,766	3/23/1999	Mahe et al	435/1.1	435/29	
	US 5,885,974	3/23/1999	Danielov, MM	514/109	514/103	
	US 5,889,052	3/30/1999	Klimko, et al	514/530	514/573	
	US 5,892,099	4/6/1999	Maruyama, et al	560/121	560/15	
	US 5,958,723	9/28/1999	Abramovitz et al	435/69.1	536/23.5	
	US 5,972,965	10/26/99	Taniguchi et al	514/326	514/374	
	US 5,973,002	10/26/99	Frolich et al	514/530	514/530	
	US 5,977,173	11/2/99	Wos et al	514/530	514/562	
	US 5,985,597	11/16/99	Ford-Hutchinson et al	435/69.1	435/252.3	
	US 5,990,346	11/23/99	Kataoka et al	562/503	549/422	
	US 5,994,397	11/30/99	Selliah et al	514/473	549/475	
	US 6,013,823	1/11/00	Mamarella et al	556/443	--	
	US 6,025,375	2/15/00	Taniguchi et al	514/374	548/236	
	US 6,025,392	2/14/00	Selliah et al	514/473	549/475	
	US 6,030,959	2/29/00	Tremont et al	514/63	556/418	
	US 6,030,999	2/29/00	Stjernschantz et al	514/530	--	
	US 6,031,001	2/29/00	Stjernschantz et al	514/573	--	
	US 6,031,079	2/29/00	Ford-Hutchinson et al	530/350	435/69.1	
	US 6,037,364	3/14/00	Burk, RM	514/438	514/461	
BB	US 6,037,368	3/14/00	Podos et al	514/530	514/573	
BB	US 6,043,264	3/28/00	Ohtake et al	514/374	514/444	

### FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES NO
BE 746615 ✓	7/31/70	Belgium	A61K		X
DE 1617477 ✓	1/8/70	Germany	A61K		X
DE 2460990 ✓	12/21/74	Germany	C07C	177/00	X
EP 249194 ✓	6/9/86	EPO	A61K	31/557	
EP 648488 ✓	10/13/93	EPO	A61K	31/00	X
EP 911321 ✓	4/28/99	EPO	C07C	311/13	
EP 925787 ✓	6/30/99	EPO	A61K	31/557	
EP 970697 ✓	9/16/99	EPO	A61K	31/557	
EP 947500 ✓	10/6/99	EPO	C07C	233/25	
EP 1008588 ✓	2/10/98	EPO	C07C	405/00	
EP 1016660 ✓	9/07/98	EPO	C07D	209/42	
FR 2,108,027 ✓	9/27/71	FRANCE	A61K	7/00	X
FR 2,730,811 ✓	2/27/95	FRANCE	G01N	33/48	X
GB 1251750 ✓	10/27/71	GREAT BRITAIN	C07C	61/32	
GB 1285371 ✓	8/16/72	GREAT BRITAIN	A61K	27/00	
GB 1285372 ✓	8/16/72	GREAT BRITAIN	C07C	61/32	
GB 1456512 ✓	11/24/76	GREAT BRITAIN	C07C	177/00	
GB 1456513 ✓	11/24/76	GREAT BRITAIN	C07D	307/93	
GB 1456514 ✓	11/24/76	GREAT BRITAIN	C07F	9/40	
GB 2048254 ✓	12/10/80	UNITED KINGDOM	C07C	177/10	
GB 2330307 ✓	4/21/99	UNITED KINGDOM	A61K	31/557	
JP 3-83,925 ✓	4/9/91	JAPAN	A61K	31/557	X
JP 3-83,926 ✓	4/9/91	JAPAN	A61K	31/557	X
JP 4-300,833 ✓	10/23/92	JAPAN	A61K	31/557	X
JP 9-295,921 ✓	11/18/97	JAPAN	A61K	7/06	X

17013	JP 10-287,532 ✓	10/27/98	JAPAN	A61K	7/06	X	
	JP 49-101,356 ✓	9/25/74	JAPAN	16C86	--	X	
	JP 49-102,647 ✓	9/27/74	JAPAN	16C68	--	X	
	JP 61-218,510 ✓	9/29/86	JAPAN	A61K	7/06	X	
	WO 00/2450 ✓	1/20/2000	PCT	A01N	37/08		
	WO 00/3736 ✓	1/27/2000	PCT	A61K	47/44	Abstract only	
	WO 00/3980 ✓	1/27/2000	PCT	C07C	405/00		
	WO 00/4898 ✓	2/3/2000	PCT	A61K	31/215		
	WO 00/4899 ✓	2/3/2000	PCT	A61K	31/215		
	WO 00/9557 ✓	2/24/2000	PCT	C07C	14/47		
	WO 00/13664 ✓	3/16/2000	PCT	A61K	47/36		
	WO 00/15608 ✓	3/23/2000	PCT	C07C	405/00	Abstract only	
	WO 00/16760 ✓	3/30/2000	PCT	A61K	31/00		
	WO 86/00616 ✓	1/30/1986	PCT	C07D	239/02		
	WO 94/08585 ✓	4/28/94	PCT	A61K	31/557		
	WO 95/00552 ✓	1/5/95	PCT	C07K	13/00		
	WO 95/11003 ✓	4/27/95	PCT	A61K	7/42		
	WO 95/11033 ✓	4/27/95	PCT	A61K	33/24		
	WO 95/19964 ✓	7/27/95	PCT	C07C	405/00		
	WO 96/10407 ✓	4/11/96	PCT	A61K	31/557		
	WO 97/09049 ✓	3/13/97	PCT	A61K	31/557	Abstract only	
	WO 97/15319 ✓	5/1/97	PCT	A61K	38/18	Abstract only	
	WO 97/23223 ✓	7/3/97	PCT	A61K	31/557		
	WO 97/23225 ✓	7/3/97	PCT	A61K	31/557		
	WO 97/23226 ✓	7/3/97	PCT	A61K	31/557		
	WO 97/29735 ✓	8/21/97	PCT	A61K	7/42		
	WO 97/39754 ✓	10/30/97	PCT	A61K	31/557	Abstract only	
	WO 98/00100 ✓	1/8/98	PCT	A61K	7/42		
	WO 98/12175 ✓	--	PCT	C07C	405/00		
	WO 98/13016 ✓	4/02/98	PCT	A61K	7/42		
	WO 98/19680 ✓	5/14/98	PCT	A61K	31/557		
	WO 98/20880 ✓	5/22/98	PCT	A61K	31/557		
	WO 98/20881 ✓	5/22/98	PCT	A61K	31/557		
	WO 98/21180 ✓	5/22/98	PCT	C07C	405/00		
	WO 98/21181 ✓	5/22/98	PCT	C07C	405/00		
	WO 98/21182 ✓	5/22/98	PCT	C07C	405/00		
	WO 98/27976 ✓	7/2/98	PCT	A61K	31/18		
	WO 98/28264 ✓	7/2/98	PCT	C07C	311/06	Abstract only	
	WO 98/33497 ✓	8/6/98	PCT	A61K	31/215		
	WO 98/39293 ✓	9/11/98	PCT	C07C	405/00	Abstract only	
	WO 98/50024 ✓	11/12/98	PCT	A61K	31/215		
	WO 98/53809 ✓	12/3/98	PCT	A61K	31/215		
	WO 98/57930 ✓	12/23/98	PCT	C07C	405/00	Abstract only	
	WO 98/57942 ✓	12/23/98	PCT	C07D	307/20		
	WO 98/58911 ✓	12/30/98	PCT	C07C	405/00		
	WO 99/02165 ✓	1/21/99	PCT	A61K	31/557	Abstract only	
	WO 99/12550 ✓	3/18/99	PCT	A61K	31/557		
	WO 99/12551 ✓	3/18/99	PCT	A61K	31/557		
	WO 99/12895 ✓	3/18/99	PCT	C07C	405/00		
	WO 99/12896 ✓	3/18/99	PCT	C07C	405/00		
	WO 99/12897 ✓	3/18/99	PCT	C07C	405/00		
	WO 99/12898 ✓	3/18/99	PCT	C07C	405/00		
	WO 99/12899 ✓	3/18/99	PCT	C07C	405/00		
	WO 99/19300 ✓	4/22/99	PCT	C07D	213/71	Abstract only	
	WO 99/21562 ✓	5/6/99	PCT	A61K	31/557		
	WO 99/22731 ✓	5/14/99	PCT	A61K	31/44		
	WO 99/25357 ✓	5/27/99	PCT	A61K	31/557	Abstract only	
	WO 99/25358 ✓	5/27/99	PCT	A61K	31/557		
	WO 99/30675 ✓	6/24/99	PCT	A61K	7/06		
	WO 99/30718 ✓	6/24/99	PCT	A61K	31/557	Abstract only	
	WO 99/32441 ✓	7/1/99	PCT	C07C	405/00	Abstract only	
	WO 99/32640 ✓	7/1/99	PCT	C12N	15/62		

BB	WO 99/32641 ✓	7/1/99	PCT	C12N	15/80		
	WO 99/33794 ✓	7/8/99	PCT	C07C	405/00	Abstract only	
	WO 99/47497 ✓	9/23/99	PCT	C07C	315/00		
	WO 99/50241 ✓	10/7/99	PCT	C07C	405/00		
	WO 99/50242 ✓	10/7/99	PCT	C07C	405/00		
	WO 99/61029 ✓	12/2/99	PCT	A61K	31/557	Abstract only	
	WO 99/64621 ✓	12/16/99	PCT	C12Q	1/25	Abstract only	
	WO 99/65303 ✓	12/23/99	PCT	A01N	37/08		
	WO 99/65527 ✓	12/23/99	PCT	A61K	47/10		
BB							

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

BB	✓	DeLong MA Prostaglandin receptor ligands: Recent patent activity. <i>Drugs</i> 2000 3(9); 1039-1052
	✓	Negishi, M.; Sugimoto, Y.; Ichikawa, A.; Molecular mechanisms of diverse actions of prostanoid receptors. <i>Biochimica et Biophysica Acta</i> 1259 1995 109-120.
	✓	Collins, PW; Djuric SW; Synthesis of therapeutically useful prostaglandin and prostacyclin analogs <i>Chem. Rev.</i> 1993 93 1533-1564.
BB	✓	Coleman RA, Kennedy I, Humphrey PPA, Bunce K, Lumley P Prostanoids and their receptors. <i>Comprehensive Medicinal Chemistry</i> , Vol. 3; Membranes and Receptors. 1990 643-714
Unable to obtain reference		<del>Coleman RA, Smith WL, Narumiya S <i>Pharmacol. Rev.</i> 1994 46 205-220.</del>
BB	✓	Albert Alm, MD The Potential of prostaglandin derivates in glaucoma therapy; <i>Prostaglandins and derivates Current Opinion in Ophthalmology</i> 1993 4(11) 44-50.
	✓	Coleman RA, Smith WL, Narumiya S Classification of prostanoid receptors: properties, distribution, and structure of the receptors and their subtypes <i>Pharmacological Reviews</i> 1994 46(2) 205-229.
	✓	Kiriyama M, Ushikubi F, Kobayashi T, Hirata M, Sugimoto Y, Narumiya S Ligand binding specificities of the eight types and subtypes of the mouse prostanoid receptors expressed in Chinese hamster ovary cells <i>British Journal of Pharmacology</i> 1997 (122) 217-224.
	✓	Funk CD, Furci L, Fitzgerald GA, Cloning and expression of a cDNA for the human prostaglandin E receptor EP <sub>1</sub> subtype* <i>Journal of Biological Chemistry</i> 1993 (268) 26767-26772.
	✓	Abramovitz M, Boie Y, Nguyen T, Rushmore TH, Bayne MA, Metters KM, Slipetz DM and Grygorczyk R Cloning and expression of a cDNA for the human prostanoid FP receptor <i>Journal of Biological Chemistry</i> 1994 269 2632-2636.
	✓	Ichikawa EA, Sugimoto Y, Negishi M Molecular aspects of the structures and functions of the prostaglandin E receptors <i>Journal of Lipid Mediators Cell Signalling</i> 14 1996 83-87.
	✓	Krauss AHP, Woodward DF, Gibson LL, Protzman CE, Williams LS, Burk RM, Gac TS, Roof MB, Abbas F, Marshall K, Senior J Evidence for human thromboxane receptor heterogeneity using a novel series of 9,11-cyclic carbonate derivatives of prostaglandin-F <sub>2</sub> -alpha <i>British Journal of Pharmacology</i> 1996 117(6) 1171-1180.
BB	✓	Corsini A, Folco GC, Fumagalli R, Nicosia S, Noe MA, Oliva D (5Z)-Carbacyclin discriminates between prostacyclin receptors coupled to adenylate cyclase in vascular smooth muscle and platelets <i>British Journal of Pharmacology</i> 1987 90 255-261.
Unable to obtain reference		<del>Woodward DF, Gil DW, Chen J, Burk RM, Kedzie KM, Krauss AH-P Emerging evidence for additional prostanoid receptor subtypes <i>Cur. Top. Pharmacol.</i> 1998 4 153-162.</del>
BB	✓	Woodward DF, Madhu C, Rix P, Kharlam A Studies on the ocular effects of a pharmacologically novel agent prostaglandin F <sub>2</sub> alpha 1-OCH <sub>3</sub> (AGN 191129) <i>N-S Archives of Pharmacology</i> 1998 358 (1). P1713
BB	✓	Orlicky DJ Negative regulatory activity of a prostaglandin F <sub>2</sub> α receptor associated protein (FPRP) <i>Prostaglandins, Leukotrienes and Essential Fatty Acids</i> 1996 54(4) 247-259.

BB	✓	Jakobsson PJ, Morgenstern R, Mancini J, Ford-Hutchinson A, Persson B Membrane-associated proteins in eicosanoid and glutathione metabolism (MAPEG)-A widespread protein superfamily <i>Am. J. Resp. Crit. Care Med.</i> 2000 (161) S20-S24.
	✓	Abramovitz M, Adam M, Boie Y, Carriere MC, Denis D, Godbout C, Lamontagne S, Rochette C, Sawyer N, Tremblay NM, Belley M, Gallant M, Dufresne C, Gareau Y, Ruel R, Juteau H, Labelle M, Ouimet N, Metters KM The utilization of recombinant prostanoid receptors to determine the affinities and selectivities of prostaglandins and related analogs <i>Biochimica et Biophysica Acta</i> 2000 1483 (2) 285-293.
	✓	Ruel R, Lacombe P, Abramovitz M, Godbout C, Lamontagne S, Rochette C, Sawyer N, Stocco R, Tremblay NM, Metters KM, Labelle M New class of biphenylene dibenzazocinones as potent ligands for the human EP <sub>1</sub> prostanoid receptor <i>Bioorganic &amp; Medicinal Chemistry Letters</i> . 1999 (9) 2699-2704.
BB	✓	Hallinan EA, Hagen TJ, Tsymbalov S, Husa RK, Lee AC, Staplefield A, Savage MA Aminoacetyl moiety as a potential surrogate for diacylhydrazine group of SC-51089, a potent PGE <sub>2</sub> antagonist, and its analogs <i>J. Med. Chem.</i> 1996 39 609-613
Unable to obtain reference	✓	<del>Pharmaprojects No.6321</del>
BB	✓	Maruyama T, Koketsu M, Yamamoto H, Yamamoto K, Yamamoto L T, Hayashida K I, Ohuchida S, Kondo K EP <sub>1</sub> receptor antagonists suppress tactile allodynia in rats <i>Prostaglandins Lipid Mediat.</i> 1999 59 217.
Unable to obtain reference	✓	<del>ADIS, ADISINSIGHT: ZD-6416 Mar. 27-2000</del>
BB	✓	Ueda K, Saito A, Nakano H, Aoshima M, Yokota M, Muraoka R, Iwaya T Brief clinical and laboratory observations: Cortical hyperostosis following long-term administration of prostaglandin E <sub>1</sub> in infants with cyanotic congenital heart disease <i>The Journal of Pediatrics</i> 1980 97 834-836.
	✓	Shih MS, Norridin RW PGE <sub>2</sub> induces regional remodeling changes in Haversian envelope: A histomorphometric study of fractured ribs in beagles <i>Bone and Mineral</i> 1986 (1) 227-234.
	✓	Mori S, Jee WSS, Li XJ, Chan S, Kimmel DB Effects of prostaglandin E <sub>2</sub> on production of new cancellous bone in the axial skeleton of ovariectomized rats <i>Bone</i> 1990 (11) 103-113.
	✓	Chyun YS, Raisz LG Stimulation of bone formation by prostaglandin E <sub>2</sub> <i>Prostaglandins</i> 1984 (27) 97-103.
	✓	Norridin RW, Jee WSS, High WB The role of prostaglandins in bone in vivo <i>Prostaglandins, Leukotrienes and Essential Fatty Acids</i> 1990 (41) 139-149.
	✓	Roof SL, deLong MA, Charest RP mRNA expression of prostaglandin receptors EP <sub>1</sub> , EP <sub>2</sub> , EP <sub>3</sub> , and EP <sub>4</sub> in human osteoblast-like cells and 23 human tissues <i>Journal Bone Min. Res.</i> 1996 (11) S337.
	✓	Hartke JR, Jankowsky ML, deLong MA, Soehner ME, Jee WSS, Lundy MW Prostanoid FP agonists build bone in the ovariectomized rat <i>J. Bone Min. Res.</i> 1999 (14) T326, pg S207.
	✓	Lundy MW, deLong MA, Combs KS, Gross GJ, Soehner ME, Hartke JR Restoration of cancellous architecture and increased bone strength in aged osteopenic rats treated with fluprostenol <i>J. Bone Min. Res.</i> 1999 1(4) SA368, pg S401.
	✓	Wang Y, Wos JA, Dirr MA, Soper DL, deLong MA, Mieling G, De B, Amburgey J, Suchanek E, Taylor CJ The design and synthesis of 13, 14- dihydro prostaglandin F <sub>2</sub> α analogs as potent and selective ligands for the human FP receptor. <i>J. Med. Chem.</i> 2000 43(5) 945-952.
BB	✓	Sakuma Y, Tanaka K, Suda M, Yasuda A, Natsui K, Tanaka I, Ushikubi F, Narumiya S, Segi E, Sugimoto Y, Ichikawa A, Nakao K Crucial involvement of the EP <sub>4</sub> subtype of prostaglandin E receptor in osteoclast formation by proinflammatory cytokines and lipopolysaccharide <i>J. Bone and Mineral Research</i> . 2000 15(2) 218-227.

unable to obtain	DelToro F Jr, Sylvia VL, Schubkegel SR, Campos R, Dean DD, Boyan BD, Schwartz Z Characterization of prostaglandin E <sub>2</sub> receptors and their role in 24,25-(OH) <sub>2</sub> D <sub>3</sub> -mediated effects on resting zone chondrocytes <i>J. Cell Physiol.</i> 2000 182(2) 196-208.
BB	✓ Narumiya S Roles of prostanoids in health and disease, lessons from receptor-knockout mice <i>Int. Congr. Ser.</i> 1999 1181 261-269
	✓ Audoly LP, Tilley J, Goulet J, Key M, Nguyen M, Stock JL, McNeish JD, Koller BH, Coffman TM Identification of specific EP receptors responsible for the hemodynamic effects of PGE <sub>2</sub> <i>Am. J. Physiol.</i> 1999 26(3) H924-930.
	✓ Vayssairat M Preventive effect of an oral prostacyclin analog, beraprost sodium, on digital necrosis in systemic sclerosis <i>J. Rheumatol.</i> 1999 26(10) 2173-2178.
	✓ Murakami T, Sawada K, Taneda K, Hayashi M, Katsuura Y, Tanabe H, Kiyoki M, and Araki H. Effect of Isocarbacyclin methyl ester incorporated in lipid microspheres on experimental models of peripheral obstructive disease. <i>Arzheim.-Forsh./Drug Res.</i> 1995 45(II) Nr. 9, pg 991-994.
	✓ Hall A, Smith WHT Clinprost Teljin <i>Current Opinion in Cardiovascular, Pulmonary &amp; Renal Investigations Drugs</i> 1999 1(5) 605-610.
BB	✓ Terada N, Yamakoshi T, Hasegawa M, Tanikawa H, Nagata H, Maesako KI, Konno A Effect of a thromboxane A <sub>2</sub> receptor antagonist, ramatroban (BAY U3405), on inflammatory cells, chemical mediators and non-specific nasal hyperreactivity after allergen challenge in patients with perennial allergic rhinitis <i>Allergology International</i> . 1998 47(1), 59-67.
Unable to obtain reference	Miyamoto T, Takishima T A comparison in the efficacy and safety between ramatroban (BAY u 3405) and ezagrel-HCl for bronchial asthma: a phase III, multi-center, randomized, double-blind, group comparative study <i>Rinsho Iyaku</i> . 1997 19-599-639.
BB	✓ Rampton DS, Carte E, Van Nueten L Anti-inflammatory profile in vitro of ridogrel, a putative new treatment for inflammatory bowel disease <i>Gastroenterology</i> 1999 (116)G3477, pg 801.
BB	✓ McCullough PA Ridogrel (Janssen) <i>Current Opinion in Anti-inflammatory &amp; Immunomodulatory Investigational Drugs</i> 1999 1(3), 265-276.
	✓ Inoue H Thromboxane-A <sub>2</sub> -receptor-antagonists <i>Farumashia</i> 1996 32(10) 1221-1225. <i>English translation</i> <i>read</i>
BB	✓ Lardy C, Rousselot C, Chavennac G, Depin JC, Guerrier D Antiaggregant and antivasospastic properties of the new thromboxane A <sub>2</sub> receptor antagonist sodium 4-[[1-[[[4-chlorophenyl] sulfonyl]amino] methyl] cyclopentyl] methyl] benzeneacetate <i>Arzheim.-Forsch./Drug Res.</i> 1994 44(11) 1196-1202.
BB	✓ Cayatte AJ, Du Y, et al The thromboxane A <sub>2</sub> receptor antagonist, S18886, decreases atherosclerotic lesions and serum intracellular adhesion molecule-1 in the Apo E knockout mouse <i>Circulation</i> . 1998 98 115.
Unable to obtain reference	Verbeuren T, Descombes JJ The TP-receptor antagonist-S-18886 unmasks vascular relaxation and potentiates the anti-platelet action of PGD <sub>2</sub> <i>Thromb. Haemostasis</i> . 1997 693.
Unable to obtain reference	Yoshida K, Sato H Synthesis and pharmacological activities of the new TXA <sub>2</sub> -receptor-antagonist Z-335 and related compounds <i>AFMC</i> 1995 95 53.
BB	✓ Kerstetter JR, Brubaker RF, Wilson SE, Kullerstrand LJ Prostaglandin F <sub>2</sub> -alpha-1-isopropylester lowers intraocular pressure without decreasing aqueous humor flow <i>American Journal of Ophthalmology</i> 1988 105 30-34.
Unable to obtain reference	AGN-192024 <i>Pharmaprojects Oct. 1999</i> RB4 STG.
BB	✓ VanDenburgh AM, Laibovitz RA, Felix C A one-month dose-response study of AGN 192024, a novel antiglaucoma agent, in patients with elevated intraocular pressure <i>IOVS</i> , 1999 40 (4) 4373-B176, pg S830.

BB	✓	Chen J, Woodward DF, Gil DW, Messier T, Marshall K, Senior J AGN 191129: A neutral prostaglandin F-2 alpha (PGF <sub>2α</sub> ) analog that lacks the mitogenic and uterotonic effects typical of FP receptor agonists IOVS. 1999 40 3562-B420, pg S675.
	✓	Sharif NA, Davis TL, Williams GW <sup>3</sup> H AL-5848 ([ <sup>3</sup> H]9 beta-(+)-Fluprostenol). Carboxylic acid of travoprost (AL-6221), a novel FP prostaglandin to study the pharmacology and autoradiographic localization of the FP receptor J. Phar. Pharmacol. 1999 51(6) 685-94.
	✓	Garadi R, Silver L, Landry T, Turner FD Travoprost: A new once-daily dosed prostaglandin for the reduction of elevated intraocular pressure IOVS. 1999 40(4) 4378-B181, pg S831.
	✓	Dean TR, Barnes GE, Li B, Chandler ML Improvement of optic nerve head blood flow after one-week topical treatment with travoprost (AL-06221) in the rabbit IOVS. 1999 40(4) 2688-B563, pg S509
	✓	Griffin BW, Klimko P, Crider JY, Sharif NA AL-8810: a novel prostaglandin F <sub>2α</sub> analog with selective antagonist effects at the prostaglandin F <sub>2α</sub> (FP) receptor J. Pharmacol. Exp. Ther. 1999 290(3) 1278-1284.
	✓	Woodward DF, Bogardus AM, Donello JE, Fairbairn CE, Gil DW, Kedzie KM, Burke JA, Kharlamb A, Runde E Molecular characterization and ocular hypotensive properties of the prostanoid EP <sub>2</sub> receptor J. Oc. Pharm. Therap. 1995 11(3) 447-454.
	✓	Karim SMM, Adaikan PG, Kotegoda SR Prostaglandins and human respiratory tract smooth muscle: Structure activity relationship Adv. Prostaglandin Thromboxane Res. 1980 7 969-980.
	✓	Maw GN Pharmacological therapy for the treatment of erectile dysfunction Annu. Rep. Med. Chem. 1999 34 71-80.
BB	✓	Anon. Alprostadil (nexmed): Alprox-TD, Befar, Femprox, prostaglandin E <sub>1</sub> (nexmed) Drugs R&D 1999 2(6) 413-414.
Unable to obtain reference		Matsumura H Prostaglandins and sleep Saishin No to Shinkai Kagaku Shinzi 1998-10-79-89
BB	✓	Tomita Y, Maeda K, Tagami H Melanocyte-stimulating properties of arachidonic acid metabolites: possible role in postinflammatory pigmentation Pigm. Cell Res. 1992 5(5, Pt. 2) 357-61.
	✓	Huang A, Katori M, Kawamura M, Li B, Harada Y Different modes of inhibition of increase in cytosolic calcium and aggregation of rabbit platelets by two thromboxane A <sub>2</sub> antagonists Asia Pacific Journal of Pharmacology 1994 9 163-171
BB	✓	Flisiak R, Prokopowicz D Effect of misoprostol on the course of viral hepatitis B Hepato-Gastroenterology 1997 44(17) 1419-1425.
Unable to obtain reference		Mihale D, Cristea E, Mihale D, Cociu F The testing of the hepatoprotective action of some new synthetic prostaglandins Farmacia (Bucharest) 1999 47(5) 43-58.
BB	✓	Vengerovsky AI, Baturina NO, Saratikov AS Hepatoprotective action of prostaglandins Eksp. Klin. Farmakol. 1997 60(5) 78-82. English translation needed
BB	✓	Clissold D The potential for prostaglandin pharmaceuticals Spec. Publ. - R. Soc. Chem. 1999 244 115-129.
	✓	Zimbric, M.L.; Cappas, A.A.; Uno, H.; Albert, D.M.; EFFECTS OF LATANOPROST OF HAIR GROWTH IN THE BALD SCALP OF STUMPTAILED MACAQUES. IOVS, 1999 (40) 3569-B427, pg S676
	✓	Voss, N.G.; Lindstrom, M.J.; Zimbric, M.L.; Albert, D.M.; Uno, H INDUCTION OF ANAGEN HAIR GROWTH IN TELOGEN MOUSE SKIN BY TOPICAL LATANOPROST APPLICATION. IOVS, 1999 (40) 3570-B428, pg S676
	✓	Johnstone, M.A Hypertrichosis and increased pigmentation of eyelashes and adjacent hair in the region of the ipsilateral eyelids of patients treated with unilateral topical latanoprost. American Journal of Ophthalmology 1997 544-547
	✓	Eisenberg DL, Camras CB A preliminary risk-benefit assessment of latanoprost and unoprostone in open-angle glaucoma and ocular hypertension. Drug Safety 1999 20(6), 505-514
BB	✓	Millikan LE, Treatment of Alopecia. Journal Clinical Pharmacology 1987 (27) no. 9, pg 715

BB	✓	Depperman, W.H. jr.; Up-to-date scalp tonic. <i>New England Journal of Medicine</i> , (1970 Nov 12) 283 (20) 1115.
BB	✓	Johnstone MA Brief latanoprost Rx induces hypertrichosis. <i>Iovs</i> , (March 15, 1998) Vol. 39, No. 4, pg. S258)
Unable to obtain reference		Al-Sereiti, M.R.; Abu-Amer, K.M.; Sen, P.; Al-Fateh University of Medical Sciences, Tripoli, Libya, Indian J. <b>Pharmacology of rosemary (Rosmarinus officinalis linn.) and its therapeutic potentials</b> <i>Exp. Biol.</i> (1999), 37(2), 124-130.
BB	✓	Olsen EA, and Delong E. Transdermal viprostol in the treatment of male pattern baldness. <i>Journal of American Acad. Dermatology</i> , (1990) 23 (3 Part 1), 470-472,
	✓	Houssay AB, Arias NH, Davison TA, and Epper CE Effects of prostaglandins upon hair growth in mice. <i>Acta Physiol. Lat. Am.</i> (1976), 266(3), 186-191
	✓	Millikan LE Treatment of male pattern baldness. <i>Drug Therapy</i> 1989 19, No. 3, 62-73,
	✓	Roenigk HH New topical agents for hair growth. <i>Clinics in Dermatology</i> 1988 6 (4) 119-21.
	✓	Vincent JE Prostaglandin synthesis and selenium deficiency a hypothesis. <i>Prostaglandins</i> , (1974) 8 (4), 339-340
	✓	Malkinson FD, Geng L, and Hanson W R. Prostaglandins protect against murine hair injury produced by ionizing radiation or doxorubicin. <i>Journal Invest. Dermatol.</i> (1993) 101 (1, Suppl.), 135s-137s.
	✓	Jimenez JJ, Hussein AM, and Yunis AA. Stimulated monocyte-conditioned media protect from cytosine arabinoside-induced alopecia in rat. <i>Clin. Res.</i> (38, No. 4, 973a, (1990)
	✓	Hanson, W.R.; Pelka, A.E.; Nelson, A.K.; and Malkinson, F.D; Rush Medical Center, Chicago. 16,16 dm prostaglandin 2 protects from acute radiation-induced alopecia in mice. <i>Clin. Res.</i> (36, No. 6, 906a, 1988)
BB	✓	Ling G, Hanson WR, Malkinson FD, 16,16 dm prostaglandin E2 protects mice from fractionated radiation-induced alopecia. <i>Clin. Res.</i> , 1988 36, No. 6, 906a
Unable to obtain reference		Hanson, W.R.; Geng, L.; and Malkinson, F. D.; Loyola and Hines Medical Centers, Maywood, IL. Prostaglandin-Induced protection from radiation or doxorubicin is tissue specific in mice. <i>Journal of Investigative Dermatology</i> , (1996) vol. 106, No. 4, pg 858.
BB	✓	Geng L, Malkinson FD, Hanson WR, Misoprostol, a PGE-1 analog that is radioprotective for murine intestine and hair, induces widely different cytokinetic changes in these tissues. <i>Journal of Investigative Dermatology</i> , (1996) Vol. 106, No. 4, Pg. 858.
	✓	Geng L, Hanson WR, Malkinson FD, Topical or systemic 16,16 dm-prostaglandin E2 or WR-2721 (WR-1065) protects mice and alopecia after fractionated irradiation. <i>Int. Journal Radiat. Biol.</i> (1992), 61(4), 533-7.
	✓	Hanson WR, Pelka AE, Nelson AK, Malkinson FD Subcutaneous or topical administration of 16,16 dimethyl prostaglandin E2 protects from radiation-induced alopecia in mice. <i>Int. Journal Radiat. Oncol., Biol., Phys.</i> (1992), 23(2), 333-7
	✓	Hulan HW, Kramer JKG, The effect of long-chain monoenes on prostaglandin E2 synthesis by rat skin. <i>Lipids</i> (1977), 12(7), 604-9
	✓	Hulan HW, Hunsaker WG, Kramer JKG, Mahadevan S, The development of dermal lesions and alopecia in male rats fed rapeseed oil. <i>Can. J. Physiol Pharmacol</i> , (1976) 54, (1), 1-6.
	✓	Sredni B, Xu RH, et al The protective role of the immunomodulator AS101 against chemotherapy-induced alopecia studies on human and animal models. <i>Int. J. Cancer</i> (1996), 65 (1), 97-103
	✓	Kvedar JC, Baden HP, Topical minoxidil in the treatment of male pattern alopecia. <i>Pharmacotherapy</i> 1987 (7) No. 6, 191-97
	✓	Hecker M; Ullrich,V; Studies on the interaction of minoxidil with prostacyclin synthase in-vitro. <i>Biochem. Pharmacol.</i> , (1988) 37(17), 3363-3365
	✓	Michelet JF,Commo S, Billoni N, Mahe YF, Bernard BA Activation of cytoprotective prostaglandin synthase-1 by minoxidil as a possible explanation for its hair growth-stimulation effect. <i>Journal of Investigative Dermatology</i> (1997), 108(2), 205-209.
	✓	Lachgar S, Charveron M, Bouhaddioui N, Gall Y, Bonafe JL Modulation by minoxidil and VEGF of the production of inflammatory mediators by hair follicle dermal papilla cells. <i>Journal Invest. Dermatol.</i> 1995 104, No. 1, 161
BB	✓	Lachgar, S. Charverson, M.; et al; Hair dermal papilla cell metabolism is influenced by minoxidil. <i>Fundam. Clin. Pharmacol.</i> 1997 (11, No. 2 )178

Unable to obtain reference	Lachgar, S. Charverson, M.; et al; Laboratoire Culture De Peau, Clinical and Bio-Clinical Research Group Dermatology, Toulouse, France. <del>Effect of VEGF and minoxidil on the production of arachidonic acid metabolites by cultured hair, dermal papilla cells.</del> European Journal of Dermatol. (1996), 6(5), 365-368	
BB	Sauk JJ, White JG, Witkop CJ. Influence of prostaglandin E-1 prostaglandin E-2 and arachidonate on melanosomes in melanocytes and keratinocytes of anagen bulbs in-vitro. Journal Invest. Dermatol. (1975) 64(5), 332-337	
EXAMINER	P. B. Dees	
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		DATE CONSIDERED 3/4/03

Patent and Trademark Office - U.S. DEPARTMENT OF COMMERCE

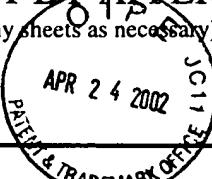
**COPY OF PAPERS  
ORIGINALLY FILED**

Please type a plus sign (+) inside this box → [+]

PTO/SB/08A (10-01)

Approved for use through 10/31/2002 OMB 0651-0031  
Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO		COMPLETE IF KNOWN	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <small>(use as many sheets as necessary)</small>		Application Number	09/774,557
<div style="text-align: center; margin: 10px 0;">     </div> <b>SHEET 1 of 1</b>		Confirmation Number	4943
		Filing Date	January 31, 2001
		First Named Inventor	M. A. DeLong et al.
		Group Art Unit	1615
		Examiner Name	
		Attorney Docket Number	7998

<b>U. S. PATENT DOCUMENTS</b>					
EXAMINER INITIALS*	Cite No. <sup>1</sup>	DOCUMENT NUMBER Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		US-			

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIALS*	Cite No. <sup>1</sup>	<b>FOREIGN PATENT DOCUMENT</b>			Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)		Publication Date MM-DD-YYYY
BB	1	WO	00/07627	A2	02/17/2000	Johnson & Johnson Cons. Co.
BB	2	WO	00/51979	A1	09/08/2000	The Procter & Gamble Co.
BB	3	WO	00/51980	A1	09/08/2000	The Procter & Gamble Co.

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

EXAMINER INITIALS*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>6</sup>

**EXAMINER** *DeLong* **DATE CONSIDERED** *3/3/03*

EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, D.C. 20231.